Appl. No.: To be assigned Div. of Appl. No. 10/268,059

Applicants: Edwards, et al.

WHAT IS CLAIMED IS:

1. An indicating device comprising:

a casing;

a body disposed within the casing and reversibly moveable between a first position

and a second position;

an indicator reversibly moveable between a rest position and an indicating position;

and

a means for coupling the body and the indicator;

wherein upon a first movement of the body from the first position to the second

position the means for coupling couples the body and the indicator, and upon a second

movement of the body from the second position to the first position the indicator moves from

the rest position to the indicating position.

2. The indicating device of claim 1, wherein upon a subsequent movement of the body

from the first position to the second position the body and the indicator remain

coupled and the indicator moves from the indicating position to the rest position, and

upon a subsequent movement of the body from the second position to the first

position the body and the indicator remain coupled and the indicator moves from the

rest position to the indicating position.

3. The indicating device of claim 1, wherein the indicator makes an audible click when

the means for coupling couples the body and the indicator.

4. The indicating device of claim 1, wherein the indicator is disposed in the casing.

5. The indicating device of claim 1, wherein a portion of the indicator is outside of the

casing when the indicator is in the indicating position.

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6. The indicating device of claim 1, wherein the indicator comprises a ring disposed between the casing and the body.

- 7. The indicating device of claim 1, wherein the means for coupling comprises a lip coupled to the indicator and a flange coupled to the body for engaging the lip.
- 8. The indicating device of claim 7, wherein the flange comprises a ratchet surface so that the lip remains locked with the flange once the flange engages the lip.
- 9. The indicating device of claim 7, wherein the means for coupling further comprises a stop coupled to the body for coupling the lip between the stop and the flange.
- 10. The indicating device of claim 1, further comprising a means for decoupling the body and the indicator.
- 11. The indicating device of claim 10, wherein the means for decoupling is configured so that applying an axial force to the indicator disengages the flange from the lip.
- 12. The indicating device of claim 10, wherein the means for decoupling comprises a knob coupled to the indicator.
- 13. A device for emitting powder comprising an indicating device of claim 1.
- 14. The device for emitting powder of claim 13, wherein the indicating device indicates the device is ready for use when the indicator is in the indicating position.
- 15. An indicating device comprising:
 - a casing;
- a body disposed within the casing and reversibly moveable between a first position and a second position;
 - an indicator reversibly moveable between a rest position and an indicating position;
 - a lip coupled to the indicator; and
 - a flange coupled to the body for engaging the lip;

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wherein the flange engages the lip upon a first movement of the body from the first position to the second position, and wherein the engagement of the flange to the lip causes the indicator to move from the rest position to the indicating position upon a second movement of the body from the second position to the first position.

16. A device for emitting powder, comprising:

a casing, said casing comprising at least one aperture configured to emit powder therethrough;

a cylindrical chamber, defined by a straight wall of circular cross-section, disposed in said casing, said chamber having a proximal end and a distal end, said chamber comprising a ring circumferentially coupled to an inner surface of said chamber;

a body disposed within the casing and reversibly moveable between a first position and a second position;

an indicator reversibly moveable between a rest position and an indicating position; and

a means for coupling the body and the indicator;

wherein upon a first movement of the body from the first position to the second position the means for coupling couples the body and the indicator, and upon a second movement of the body from the second position to the first position the indicator moves from the rest position to the indicating position.

- 17. The device of claim 16, wherein the casing further comprises a hemispheric region defining said at least one aperture.
- 18. The device of claim 16, further comprising a second casing, the body being disposed in the second casing.

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19. The device of claim 16, wherein upon a subsequent movement of the body from the first position to the second position the body and the indicator remain coupled and the indicator moves from the indicating position to the rest position, and upon a subsequent movement of the body from the second position to the first position the body and the indicator remain coupled and the indicator moves from the rest position to the indicating position.

- 20. The device of claim 16, wherein the indicator makes an audible click when the means for coupling couples the body and the indicator.
- 21. The device of claim 16, wherein a portion of the indicator is outside of the casing when the indicator is in the indicating position.
- 22. The device of claim 16, wherein the indicator comprises a ring disposed between the casing and the body.
- 23. The device of claim 16, wherein the means for coupling comprises a lip coupled to the indicator and a flange coupled to the body for engaging the lip.
- 24. The device of claim 23, wherein the flange comprises a ratchet surface so that the lip remains locked with the flange once the flange engages the lip.
- 25. The device of claim 23, wherein the means for coupling further comprises a stop coupled to the body for coupling the lip between the stop and the flange
- 26. The device of claim 16, further comprising a means for decoupling the body and the indicator.
- 27. The device of claim 26, wherein the means for decoupling is configured so that applying an axial force to the indicator disengages the flange from the lip.
- 28. The device of claim 26, wherein the means for decoupling comprises a knob coupled to the indicator.

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29. A device for emitting powder, comprising:

a casing, said casing comprising at least one aperture configured to emit powder

therethrough;

a cylindrical chamber, defined by a straight wall of circular cross-section, disposed in

said casing, said chamber having a proximal end and a distal end, said chamber comprising a

ring circumferentially coupled to an inner surface of said chamber;

a body disposed within the casing and reversibly moveable between a first position

and a second position;

an indicator reversibly moveable between a rest position and an indicating position;

a lip coupled to the indicator; and

a flange coupled to the body for engaging the lip;

wherein the flange engages the lip upon a first movement of the body from the first

position to the second position while the indicator remains in the rest position, and wherein

the engagement of the flange to the lip causes the indicator to move from the rest position to

the indicating position upon a second movement of the body from the second position to the

first position.

30. The device for emitting powder of claim 29, wherein the casing further comprises a

hemispheric region defining said at least one aperture.

31. The device for emitting powder of claim 29, further comprising a second casing, the

body being disposed in the second casing.

32. A device for emitting powder, comprising:

a casing, said casing comprising at least one aperture configured to emit powder

therethrough;

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a cylindrical chamber, defined by a straight wall of circular cross-section, disposed in said casing, said chamber having a proximal end and a distal end, said chamber comprising a ring circumferentially coupled to an inner surface of said chamber;

a means for indicating readiness of the device for emitting powder.

33. A method for indicating the readiness of a device for dispensing a medicament, comprising:

providing a device for dispensing a medicament, the device comprising

a casing comprising at least one aperture configured to emit powder therethrough,

a body coupled to said casing and reversibly moveable between a first position and a second position, and

an indicator coupled to said casing and reversibly moveable between a rest position and an indicating position;

applying an axial force to said body to move said body from said first position to said second position, which readies the powder for dispensing and couples said body to said indicator; and

releasing said axial force from said body to allow said body to move from said second position to said first position, which moves said indicator to said indicating position.

- 34. The method of claim 33, further comprising decoupling said indicator from said body; and moving said indicator to said rest position.
- 35. A method of indicating that a device for dispensing a medicament has been used, comprising:

providing a device for dispensing a medicament, the device comprising

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a casing comprising at least one aperture configured to emit a medicament therethrough,

a body coupled to said casing and reversibly moveable between a first position and a second position, and

an indicator coupled to said casing and reversibly moveable between a rest position and an indicating position;

applying an axial force to said body to move said body from said first position to said second position, which couples said body to said indicator;

dispensing the medicament from the device;

releasing said axial force from said body to allow said body to move from said second position to said first position, which moves said indicator to said indicating position to indicate that the device has been used.

36. The method of claim 35, further comprising decoupling said indicator from said body; and moving said indicator to said rest position.

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